



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/775,074

02/01/2001

Gerhard Reichert

1663-I-CIP

8012

45069 7590 05/03/2007  
FRED ZOLLINGER III  
P.O. BOX 2368  
NORTH CANTON, OH 44720

EXAMINER

A, PHI DIEU TRAN

ART UNIT

PAPER NUMBER

3637

MAIL DATE

DELIVERY MODE

05/03/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/775,074		GERHARD REICHERT	
	<b>Examiner</b>		<b>Art Unit</b>	
	Phi D. A		3637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 23-30,32,33,36-39,41-49,69 and 71-75 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26,27,36-39 and 41-49 is/are allowed.
- 6) ☒ Claim(s) 23-25,28-30,32,33,69,71-75 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/7/07 has been entered.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 23, 28-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Reed (4567710).

Reed (figure 1, 13) shows a simulated divided lite insulating glazing unit having an internal muntin bar grid (32, 33, figure 13), the unit comprising first and second spaced glass sheets spaced apart by a perimeter spacer (figure 2), the glass sheets and the spacer defining an insulating chamber, an internal muntin bar grid disposed inside the chamber, the internal bar grid extending between different portions of the spacer to divide the chamber into separate lites to provide a divided lite appearance to the unit, the internal bar grid having a plurality of rigid inner muntin grid elements and a plurality of flexible, collapsible outer muntin grid elements 9, figure 13), the inner grid elements crossing each other and being arranged in a grid that defines the

Art Unit: 3637

pattern of the internal bar grid, each of the inner muntin grid elements having longitudinal edges and longitudinal sides, when separated from the inner grid elements, the collapsible outer muntin grid elements (9) are capable of being collapsed to a collapsed position and reopened to an open position wherein each outer element defining a longitudinal openings (inherently capable of functioning as claimed), each outer grid element surrounding at **least a portion** (portion 36, and the area at 33 is surrounded as claimed) of an inner muntin grid element to hide the longitudinal edges and sides of that portion of the inner grid element from view of both sides of the unit, the outer muntin grid elements are in the form of continuous tubes disposed around the inner muntin grid elements, the outer muntin grid elements are connected to the inner muntin grid elements with connectors (28, 30), at least one of the outer muntin grid elements includes at least one protruding foot (25) that increases the width of the outer muntin grid element, the foot protruding in a direction perpendicular to the first and second glass sheets, each of the outer muntin grid elements being a unitary tube having a continuous sidewalls, the outer grid elements being from a non-metallic material, the inner muntin grid elements cross each other at lap joints.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 24, 69, 71-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed in view of Baier (5345743).

Art Unit: 3637

Reed shows all the claimed limitations except for the muntin outer grid being made of foam material.

Baier discloses the use of foam material for forming a muntin grid (22).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's structure to show the muntin outer grid being made of foam material as taught by Baier because foam material is a well known plastic material for forming muntin grid, and the use of foam material to form a flexible muntin grid would have been obvious to one having ordinary skill in the art.

Per claim 73, Reed as modified shows all the claimed limitations except for the outer muntin grid elements being notched at the lap joints.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's modified structure to show the outer muntin grid elements being notched at the lap joints because it would allow the outer elements to continue covering the inner elements beyond the joint area.

5. Claim 74 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed.

Reed shows all the claimed limitations except for the outer muntin grid elements being notched at the lap joints.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's structure to show the outer muntin grid elements being notched at the lap joints because it would allow the outer elements to continue covering the inner elements beyond the joint area.

Art Unit: 3637

6. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed in view of Baier (5345743).

Reed as modified shows all the claimed limitations except for the foam material including a desiccant.

Baier further discloses desiccant within an insulated glass to absorb moisture within the glass chamber.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's modified structure to show the foam material including a desiccant as taught by Baier because it would help absorb moisture seeping into the double layer glass panel and thus keeping the panels clear.

7. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed.

Reed shows all the claimed limitations except for the outer muntin grid elements being resilient.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's structure to show the outer muntin grid elements being resilient because having the grid elements formed of resilient material would allow the outer grid elements to repeatedly flex and hold tight to the inner grid elements.

8. Claim 33, 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed.

Reed shows all the claimed limitations except for the outer muntin grid elements being resilient.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's structure to show the outer muntin grid elements being resilient

Art Unit: 3637

because having the grid elements formed of resilient material would allow the outer grid elements to repeatedly flex and hold tight to the inner grid elements.

Per claim 75, Reed as modified shows all the claimed limitations except for the outer muntin grid elements being notched at the lap joints.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's modified structure to show the outer muntin grid elements being notched at the lap joints because it would allow the outer elements to continue covering the inner elements beyond the joint area.

***Allowable Subject Matter***

9. Claims 26-27, 36-39, 41-49 are allowed.

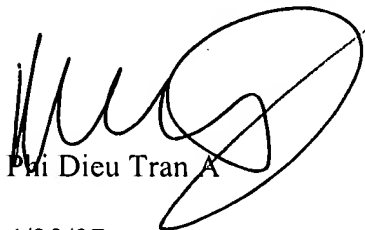
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 571-272-6864. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3637

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Phi Dieu Tran A

4/30/07